

LS telcom Summit 2011

Preliminary Conference Programme

Lichtenau, 6th July 2011 (09:00 a.m. – 04:00 p.m.)

**LS
summit 2011**
16th Annual Seminar Day

09:00 – 09:15

Welcome and Introduction to the LS Summit 2011

Dr.-Ing. Manfred Leberherz, Dr.-Ing. Georg Schöne, Dipl.-Ing. Roland Götz

09:15 – 09:45

2nd Digital Dividend or . . .

Aljo van Dijken, Senior Advisor Spectrum Affairs, Radiocommunication Agency, The Netherlands

Where Europe at the moment is coming on full steam in freeing up the 800 MHz band, mobile operators are facing other difficulties, like: "how to cope with the so called data Tsunami". Is a 2nd Digital Dividend THE future prove and sustainable way out? In a steadily becoming more complex world in utilizing spectrum, "new kids on the block" are worthwhile to be analysed. This presentation invites you to listen to some observations and assumed trends in respect to innovative initiatives. It will handle ideas on spectrum sharing, hybrid networks and, last but not least, cognitivity in relation to bi-directional sensing!

09:45 – 10:15

The Increasing Need of In-Building Design and the Drivers behind it!

Peter Thalmeir, iBwave, Germany

Over the last couple of years, In-Building Distributed Antenna Systems (DAS) have become an integral part of every mobile phone network. Mobile phone usage is more and more moving from outdoors to indoors, which is one of the drivers for the need for dedicated In-Building systems. Increasing data traffic is forcing the creation of smaller cells and again, the smallest cell can be within a Building or even a floor within a Building. Last but not least, more sophisticated modulation schemes, required for high data traffic, require increasing C/N or SNIR values. These high SNIR values in turn require a strong and dominating signal to overcome the interfering signals and again, an In-Building System is the solution.

10:15 – 10:45

Coffee Break

10:45 – 11:15

Migrating from Analogue TV directly to DVB-T2: The Challenges, Opportunities and Benefits

Gerhard Petrick, MultiChoice Technical Operations, South Africa

In November 2010 the Ministers responsible for ICT and Broadcasting from 15 Southern African countries adopted DVB-T2 as transmission standard for the region. The award winning DVB-T2 technology will now be deployed in a world, quite different from the high definition, high-end and large screen environment that dominated the agenda during the standards development and launch in Europe. Leapfrogging directly to the latest technology will yield numerous benefits to consumers and spectrum users. It will, however, not be without its unique and pressing challenges....

11:15 – 11:45

Flying Platform for Radiation Measurements

Koenie Schutte, LS of South Africa Radio Communications (Pty) Ltd., South Africa + Cédric Gonzalez, LS telcom SAS, France

The spectrum is a scarce and more and more limited resource, and therefore the need to control its use is growing. To install a transmitter, to acquire a license is a significant investment that need to be optimized. Today about 20% of interference cases remain unexplained. Meanwhile with our experience, we realized that some antennas once installed, do not fulfil the initial requirements. We therefore looked for an innovative way to measure the real antenna radiation patterns.

11:45 – 12:15

Modern Spectrum Monitoring and the Challenges of Data Analysis

Robert Thelen-Bartholomew, Erkmar Ltd., United Kingdom

Effective spectrum management needs to use evidence when making decisions and plans. With complex frequency assignments and rapidly changing environments, monitoring can be difficult and expensive to undertake. In this presentation the concepts of modern spectrum monitoring, and the challenges of efficient analysis will be considered as well as the solutions available from LS telcom.

12:15 – 13:30

Lunch Break

13:30 – 14:00

"Military Spectrum Management: Case Study OIF/OEF"

John Courtenay, LS telcom Federal Sys Inc., United States of America

The war on terrorism during Operation Iraqi Freedom and Operation Enduring Freedom created unique military spectrum challenges from those managing this finite resource and the warfighters who were impacted. Coalition and Joint spectrum management technology, processes and procedures, force structure, and challenges will be discussed. Mr. Courtenay will support the presentation through Real-World Spectrum Operational examples based on his own experiences as a U.S. Marine Spectrum Manager which will provide a unique warfighter perspective and how we, as a spectrum community, can benefit from the lessons learned.

14:00 – 14:30

Transactional Spectrum Management: a practical future or fanciful science fiction?

John Berry, InterConnect Communications, United Kingdom

Spectrum management methods will divide. Some spectrum users will bid at auction for allotments for self management. Others will require administratively assigned channels over which they will acquire rights for a period of time. We're already heading towards transactional database assignment for white space devices. Can NRAs seek the ultimate in efficiency and apply such technology across the services, reducing spectrum management to an Amazon-style warehousing operation?

14:30 – 15:00

Coffee Break

15:00 – 15:30

Cognitive Radio Technology for Wireless Service Provision in TV White Spaces

Santosh Kawade, British Telecom, United Kingdom

In this talk we give an overview of research carried out at BT and within the EU FP7 Project QUASAR (www.quasarspectrum.eu) on assessing and developing cognitive radio technologies for wireless service provision in TV White Spaces, large portions of spatially unused TV spectrum which are being opened up by FCC and Ofcom for secondary access by cognitive radios. Results will be presented of our studies of the amount TVWS available in the UK and elsewhere for cognitive radio access. Technical and regulatory feasibility of wireless service provisioning in this spectrum will be discussed based on our system studies of a number of use cases.

15:30 – 16:00

The White Space Database

Jesse Caulfield, Key Bridge Global LLC, United States of America

This presentation will discuss how centralized administration can enable geographic spectrum sharing strategies in the TV band white spaces and beyond. A designated administrator can support effective coordination amongst competing network operators and otherwise non-compatible network technologies, while neutrality, security and reliability are all necessary for wireless co-existence and mass-market adoption.

